

Claims

- [1] A reflective structure comprising:
base, and;
a reflective means formed on said base,
wherein said base comprises:
a supporting member provided with a first fundamental surface having portions differing in their height and a second fundamental surface having portions differing in their height;
a first undulating portion, formed on said supporting member, having a first recess or projection; and
a second undulating portion, formed on said supporting member, having a second recess or projection associated with said first recess or projection,
wherein said first and second fundamental surfaces are arranged in a first direction at a first fundamental surface pitch,
wherein said first and second undulating portions are arranged in said first direction at a first undulating portion pitch,
and wherein the larger pitch of said first fundamental surface pitch and said first undulating portion pitch is a non-integral multiple of the smaller pitch.
- [2] A reflective structure as claimed in claim 1, wherein said first undulating portion is continuous with said second undulating portion.
- [3] A reflective structure as claimed in claims 1 or 2, wherein said first fundamental surface pitch is equal to a first pixel pitch.
- [4] A reflective structure as claimed in claim 3, wherein said reflective means comprises first and second reflectors, said first and second reflectors arranged in said first direction at said first pixel pitch.
- [5] A reflective structure as claimed in claim 4, wherein said supporting member comprises:
a first conductive line;
a second conductive line;
a first driving element for supplying said first reflector with data through said first conductive line; and
a second driving element for supplying said second reflector with data through said second conductive line,
wherein said first and second conductive lines are arranged in said first direction at said first pixel pitch,
and wherein said first and second driving elements are arranged in said first direction at said first pixel pitch.
- [6] A reflective structure as claimed in any one of claims 1 to 5, wherein said supporting member is provided with a third fundamental surface having portions differing in their height,

- wherein said base comprises a third undulating portion, formed on said supporting member, having a third recess or projection associated with said first recess or projection,
- wherein said first and third fundamental surfaces are arranged in a second direction at a second fundamental surface pitch,
- wherein said first and third undulating portions are arranged in said second direction at a second undulating portion pitch,
- and wherein the larger pitch of said second fundamental surface pitch and said second undulating portion pitch is a non-integral multiple of the smaller pitch.
- [7] A reflective structure as claimed in claim 6, wherein said first undulating portion is continuous with said third undulating portion.
- [8] A reflective structure as claimed in claims 6 or 7, wherein said second fundamental surface pitch is equal to a second pixel pitch.
- [9] A reflective structure as claimed in claim 8, wherein said supporting member comprises:
- a third conductive line;
 - a fourth conductive line; and
 - a third driving element controlled through said third conductive line,
- wherein said first driving element is controlled through said fourth conductive line,
- wherein said third and fourth conductive lines are arranged in said second direction at said second pixel pitch,
- and wherein said first and third driving elements are arranged in said second direction at said second pixel pitch.
- [10] A reflective structure as claimed in claim 9, wherein said reflective means comprises a third reflector corresponding to said third driving element, said first and third reflectors arranged in said second direction at said second pixel pitch.
- [11] A reflective structure as claimed in any one of claims 6 to 10, wherein said first and second directions are row and column directions, respectively.
- [12] A reflective structure as claimed in any one of claims 1 to 3, wherein said reflective means comprises a reflective line extending in said first direction.
- [13] A reflective structure comprising:
- a base; and
 - a reflective means formed on said base,
- wherein said base comprises:
- a supporting member provided with a first fundamental surface having portions differing in their height, a second fundamental surface having portions differing in their height, and a third fundamental surface having portions differing in their height;
 - a first undulating portion formed on said supporting member;

a second undulating portion formed on said supporting member; and
a third undulating portion formed on said supporting member,
wherein said first and second fundamental surfaces are arranged in a first
fundamental surface direction at a first fundamental surface pitch of a plurality
of fundamental surface pitches, said first fundamental surface pitch being the
smallest pitch of said plurality of fundamental surface pitches,
wherein said first and third fundamental surfaces are arranged in a second
fundamental surface direction at a second fundamental surface pitch of said
plurality of fundamental surface pitches, said second fundamental surface pitch
being equal to said first fundamental surface pitch or being the smallest next to
said first fundamental surface pitch,
wherein said first and second undulating portions are arranged in a first
undulating portion direction at a first undulating portion pitch of a plurality of
undulating portion pitches, said first undulating portion pitch being the smallest
pitch of said plurality of undulating portion pitches,
wherein said first and third undulating portions are arranged in a second
undulating portion direction at a second undulating portion pitch of said plurality
of undulating portion pitches, said second undulating portion pitch being equal to
said first undulating portion pitch or being the smallest next to said first
undulating portion pitch,
and wherein at least one of said first and second undulating portion directions are
different from said first and second fundamental surface directions.

- [14] A reflective structure as claimed in claim 13, wherein said first to third
undulating portions are continuous.
- [15] A reflective structure as claimed in claims 13 or 14, wherein said first
fundamental surface pitch is equal to a first pixel pitch.
- [16] A reflective structure as claimed in claim 15, wherein said reflective means
comprises first and second reflectors, said first and second reflectors arranged in
said first fundamental surface direction at said first pixel pitch.
- [17] A reflective structure as claimed in claim 16, wherein said supporting member
comprises:
a first conductive line;
a second conductive line;
a first driving element for supplying said first reflector with data from said first
conductive line; and
a second driving element for supplying said second reflector with data from said
second conductive line,
wherein said first and second conductive lines are arranged in said first
fundamental direction at said first pixel pitch,
and wherein said first and second driving elements are arranged in said first

fundamental direction at said first pixel pitch.

[18] A reflective structure as claimed in claim 17, wherein said supporting member comprises:

a third conductive line;

a fourth conductive line; and

a third driving element controlled through said third conductive line,
wherein said first driving element is controlled through said fourth conductive line,

wherein said third and fourth conductive lines are arranged in said second direction at said second pixel pitch,

and wherein said first and third driving elements are arranged in said second direction at said second pixel pitch.

[19] A reflective structure as claimed in claim 18, wherein said reflective means comprises a third reflector corresponding to said third driving element, said first and third reflectors arranged in said second direction at said second pixel pitch.

[20] A reflective structure as claimed in any one of claims 13 to 15, wherein said reflective means comprises a reflective line extending in said first fundamental surface direction.

[21] An image display device comprising said reflective structure described in any one of preceding claims.